

REMARKS

Applicants respectfully request reconsideration of the above-identified patent application. Claims 41-43 have been cancelled. Claims 1, 23, 32, 40, and 44 have been amended.

Claims 1-4, 13-17, 23-28 and 40-42 were rejected as being anticipated by Park (U.S. 6,683,438). Claims 32 and 33 were rejected as being anticipated by Kaplan (U.S. 3,689,885). Claims 5-12, 18-22 and 29-31 were rejected as obvious from Park in view of Zimmer (U.S. 6,703,920). Claims 43-46 were rejected as obvious from Park in view of Kaplan (U.S. 3,689,885).

I. Rejections under 35 USC § 102.

Claims 1-4, 13-17, 23-28 and 40-42 were rejected as being anticipated by Park. In order for a claimed invention to be anticipated under 35 U.S.C. § 102, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

A. Claims 1-4

Claim 1, as amended, is for an adapter having a contactless power interface for receiving power from a contactless power supply, a power regulator for supplying power to the remote device rechargeable power source, and a rechargeable power source for powering the adapter. The claim recites a power regulator for supplying power to the remote device's rechargeable power source. Further, the claim recites that the adapter itself has a rechargeable power source for powering the adapter.

Park shows a battery pack 300 for directly powering the mobile phone 200. Thus, the battery pack does not supply power to a rechargeable power source within the mobile phone. It also does not have a power regulator for supplying power to the remote device's rechargeable power supply.

Dependent claims 2, 3 and 4 are not anticipated by Park for the same reason, and thus are allowable over the cited art.

B. Claim 13-17

Claim 13 is for an adapter for charging a remote device's rechargeable power supply. It recites a contactless power interface for receiving power from a contactless power supply, a power regulator for supplying power to the remote device for charging the remote device rechargeable power source, and a receiver for communicating with the contactless power supply.

Park does not teach or suggest the subject matter of claim 13. The mobile phone 200 of Park does not have a rechargeable power supply; therefore, Park does not show a power regulator for supplying power to the remote device's rechargeable power source. Rather, the battery within the battery pack 300 directly powers the remote device. Thus, claim 13 is not anticipated by Park.

Claim 14 is likewise not anticipated by Park.

Claim 15 states that the adapter includes a power supply. Claim 15 therefore recites a power supply within the adapter and a power regulator supplying power to a power supply within the remote device. This also is not shown in Park.

Claim 16 recites a controller for controlling the power regulator. Park does not show a controller within battery pack 300.

Claim 17 is not anticipated by Park for the reasons stated with respect to claims 13, 14, 15 and 16.

C. Claims 23-38

Amended claim 23 is a method of operating an adapter for recharging a remote device rechargeable power source contained within a remote device with power from a contactless power supply. As amended, claim 23 recites the steps of obtaining charging information from the remote device about the remote device's rechargeable power source, providing the charging information to the contactless power supply, and supplying power to the remote device to charge the remote device rechargeable power source.

As noted previously, the mobile phone 200 in Park does not have a battery. Thus, the battery pack 300 shown in Park does not obtain charging information about a power source within the remote device because the remote device does not have its own power supply. It also does not supply power to the remote device in order to charge the remote device's rechargeable power source because the remote device does not have a rechargeable power source.

Claim 24 says that the contactless power supply receives power requirement information from the remote device. In Park, the monitoring circuit in the battery pack sends battery information to the remote device. No information regarding the battery is received by the battery pack 300 from the mobile phone 200. Thus, claim 24 is also not anticipated by Park.

Claim 25 is not anticipated by Park for the reasons stated as to claims 23 and 24.

Claim 26 recites that the adapter sends the power requirement information from the remote device by way of the first communication link. As noted above, the mobile phone shown in Park does not send any information to the adapter. Thus, claim 26 is not anticipated.

Claims 27 and 28 are not anticipated by Park for the reasons stated above.

D. Claims 32 and 33

As amended, claim 32 is directed to an adapter an adapter for supplying power to a remote device from a contactless power supply, the remote device having a rechargeable power source. Claim 32 recites that the adapter has a secondary having a first coil, a second coil and a third coil, each coil being substantially orthogonal to the other coils, a power supply for powering the adapter, and a power regulator for supplying power to the remote device's rechargeable power source.

Kaplan does not show the use of such a coil arrangement for supply power to a rechargeable power source in a remote device. Claim 32 is thus not anticipated.

Claim 33 is not anticipated for the same reasons as the amended claim 32.

E. Claims 40-42

Claims 41-43 have been cancelled. Claim 40 has been amended to incorporate the elements of claims 41-43. Claim 43 was rejected as obvious due to the combination of Park and Kaplan. Therefore, the allowability of amended claim 40 will be discussed with reference to obviousness

As amended, claim 40 is directed to an adapter having electrical connectors disposed in the same configuration as that of the removable power supply, a rechargeable power source connected to the electrical connector, a charging circuit coupled to the rechargeable power source and the secondary winding; and a secondary winding for receiving power from a contactless power supply and supplying power to the electrical connectors, the secondary winding having three orthogonal windings.

It has been suggested that it is obvious to one skilled in the art to combine Park with Kaplan, and that it would be obvious so as to facilitate charging no matter the orientation of the device to be charged.

The Applicant respectfully disagrees. Because the photo-coupler receiver 140 and the photo-coupler transmitter 340 have to be aligned, one skilled in the art would not be motivated to use a multiple-coil configuration as shown in Kaplan because no advantage would be gained. A multiple coil configuration would allow the device to be placed in different orientations to receive power from the base. However, the mobile phone would nevertheless have to be placed in a particular orientation to align the photo-couplers.

In Park, when the mobile phone is placed in the converter, the primary side 150 and the secondary side 350 are aligned *as well as* the photo-coupler receiver 140 and the photo-coupler transmitter 340. The photo-coupler receiver 140 and the photo-coupler transmitter 340 communicate by way of a light beam. In order for the photo-coupler receiver 140 and the photo-coupler transmitter 340 to receive and transmit information by way of the light beam, the two must be aligned. The mobile phone must be placed in a suitable orientation in order for communication to occur between the photo-couplers. Thus, even if the primary side 150 and the secondary side 350 did not have to be aligned, the photo-coupler receiver 140 and the photo-coupler transmitter 340 would need to be aligned. Thus, one skilled in the art would have no motivation to use a multiple-coil configuration such as the one shown in Kaplan because precise alignment would still be required.

This is further shown in that the charger 100 has an indentation so that the battery pack 300 will assume a desired orientation with respect to the charger 100. Because using a

multi-coil configuration would be needlessly redundant, one skilled in the art would use such a secondary.

II. Rejections under 35 USC § 103.

Claims 5-12, 18-22 and 29-31 were rejected as obvious from Park in view of Zimmer (U.S. 6,703,920). Claims 43-46 were rejected as obvious from Park in view of Kaplan (U.S. 3,689,885).

A. Claims 5-12

Claim 5-7 depend, either directly or indirectly, on claim 4. As stated previously, claim 4 is not anticipated by Park because the device shown in Park does not have a power regulator for supplying power to the remote device. Thus, claims 5-7 are not obvious because the combination of Park with Zimmer does not show all of the claimed elements.

Claim 8 adds the element of a controller which varies the impedance of the variable inductor in response to instructions from the contactless power supply. The device shown in Zimmer does not vary the impedance in response to instructions from the contactless power supply. Fig. 3 of Zimmer shows the circuit controlling the variable impedance. The circuit senses the resonant frequency of the resonant circuit and the excitation frequency. It then switches in or out impedances to change the resonant frequency of the resonant circuit. There is no instruction to change the impedance sent by the contactless power supply. Thus, even if Park and Zimmer were combined, not all the elements of claim 8 would be present in the combination.

Claim 9 is similarly not obvious from the combination of Park and Zimmer.

Claim 10 recites that the controller has a memory. Neither Park nor Zimmer show a memory, and therefore claim 10 is not shown by the combination of Park and Zimmer.

Claim 11 says that the memory includes an identifier. Again, this is not shown in either Park or Zimmer.

Claim 12 depends from claim 11, and is therefore allowable for the same reasons discussed with respect to claim 11.

B. Claims 18-22

Claim 18 depends from claim 17. As stated previously, Park does not show a power regulator for supplying power to the remote device's rechargeable power source. Further, Park does not show a power supply with the adapter and a power regulator for supplying power to a power supply within the remote device. The combination of Park with Zimmer will not include these elements, and therefore the claim is not obvious.

Claim 19 recites that a controller is coupled to the variable impedance element, and that the controller can change the impedance of the variable impedance element. Zimmer does not show a controller coupled to the variable impedance element. Because not all elements of the claim are shown from a combination of Park and Zimmer, claim 19 is not obvious.

Claim 20 is allowable because the claim upon which it depends is not obvious from the combination of Park and Zimmer.

Claim 21 recites that the controller controlling the variable impedance be coupled to a memory. A memory is not shown in either Park or Zimmer. Therefore, the combination of Park and Zimmer cannot result in the subject matter of claim 21.

C. Claims 29-31

Claims 29-31 depend directly or indirectly from claim 28. As stated previously, claim 28 is allowable because Park does not show several of the claimed elements. Thus, the subject matter of claims 29 and 30 is likewise not shown by a combination of Park and Zimmer.

D. Claims 43-46

Claim 43 has been cancelled and has been incorporated into claim 40. The discussion of the allowability of claim 40 is discussed above.

Claim 44 depends from 40, and is therefore allowable for the same reasons as claim 40.

Claim 45 recites a dongle connected to the transceiver for connecting the transceiver to a communication port on the remote device. None of the references show or suggest using a dongle. Park shows providing an optical communication link between the battery 300 and the charger 100. Thus, it explicitly teaches away from using a dongle.

Claim 46 is similarly allowable over the prior art as Claim 45.

CONCLUSION

In view of the above amendments and these remarks, it is respectfully submitted that the application is in condition for allowance. A notice to that effect is earnestly and respectfully requested.

Respectfully submitted,

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